

REMARKS

The allowability of the content of claims 2, 4-6, 10, 13 and 16-17 is noted with appreciation, and the dependent claims have been rewritten into independent form as required.

Claims 1 and 3 have been rejected under 35 U.S.C. 102(b) on the basis of the Derwent abstract because the claims are stated not to define applicants' "type of polyacrylates" such as to exclude any "polymeric substances...that contain(s) polyacrylate moieties", as in Derwent (admittedly "a copolymer of acrylamide and acrylic acid/acrylate").

The claims have accordingly been amended to make clearer that applicants' discovery can occur only with the gelling of "polyacrylate polymer in the form of a distribution of 45-1000 micron polyacrylate powder" (page 17 of specification), unlike any accidental "undissolved copolymer" as in the reference.

Claims 1 and 3 now recite that applicants' gel purposely and deliberately contains "entrapped water-insoluble polyacrylate" to produce "polyacrylate crystals", "locked as a deposit therein" (page 18).

This clearly defines over the stretching of the claim language to try to read on the Derwent acrylamide and acrylate copolymer disclosure where, indeed, there is no hint, and certainly no disclosure, that there is any purposeful "undissolved copolymer" at all, let alone the production of deliberately entrapped "polyacrylate crystals" "locked as a deposit" therein.

The Farm Chemicals Handbook certainly does not teach the above deficiencies in the Derwent disclosure; merely, as the Office correctly states, establishing  $P_2O_5$  as "standard fertilizer ingredients".

Claims 7-9, 11-12 and 14-15, rejected under Sec. 103(a), now contain the clarifying and distinguishing amendments of claim 1 as above discussed and are thus also allowable.

Similar remarks apply to the rejection of claims 1, 3, 7, 9, 11, 12 and 14 as anticipated by the Hughes patent 4,985,062.

While Hughes certainly teaches a "powderized polyacrylate", he clearly did not make the discovery of using that quantity of "polyacrylate polymer in the form of a distribution of 45-1000 micron polyacrylate power" that would be "sufficient" (claim 9) to produce applicants' result of the forming of the claimed "polyacrylate crystals" locked as a deposit in the gel, as now claimed.

As for claim 15, the Office concedes that Derwent "does not explicitly disclose such proportion of polyacrylate power to plant nutrient solution". But without the discovery of this critical "sufficient" quantity, applicants' structure with the locked-in deposit of polyacrylate crystals cannot be produced, so that this is not at all a "routine optimization for the ordinary skilled artisan".

With regard to claims 39-41 and their rejection under 35 U.S.C. 112, first paragraph, as containing the word "translucency", applicants have deleted the reference to translucency. These claims have been amended to conform to the original

that the gel, when formed, gives the appearance of "ice crystals"--meaning generically any and all forms of such "ice".

Apparently no one prior to applicants, produced any kind of an ice crystal appearance, and therefore this is what is generically claimed.

Reconsideration and allowance of all the claims, as amended, therefore appear to be in order and are thus respectfully requested.

Any and all costs incurred by this filing, including for any required extensions of time, petition for which is hereby made, may be charged to the deposit account, 18 - 1425 of the undersigned attorneys.

Respectfully submitted,

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